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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,617	04/14/2004	Randall J. Calistri-Yeh	55653-016	5090

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McDermott, Will & Emery
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

PANNALA, SATHYANARAYA R

ART UNIT	PAPER NUMBER
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2164

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/823,617	Applicant(s) CALISTRI-YEH ET AL.	
	Examiner Sathyanarayan Pannala	Art Unit 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-52,63,64,69 and 70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 41-52,63,64,69 and 70 is/are rejected.
- 7) ☐ Claim(s) 72-78 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/14/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Application No. 10/823617 filed on 4/14/2004 has been examined. In this Office Action, claims 41-52, 63-64, 69-70 and 72-78 are pending.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 4/14/2004 is in compliance with the provisions of 37 CFR 1.97 and has been considered by the examiner.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 41-52, 63-64, 69-70 and 72-78 are rejected under 35 U.S.C. § 101, because none of the claims are directed to statutory subject matter. Independent claims 41, 46, 50, 63-64 and 69-70 deals with simple mathematical abstract idea. A claim that recites a computer that solely calculates a mathematical formula or a computer disk that solely stores a mathematical formula is not directed to the type of statutory subject matter eligible for patent protection. The claims are not producing

useful, concrete and tangible results. See *Diehr*, 450 U.S. at 186 and *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 41-52, 63-64 and 69-70 are rejected under 35 U.S.C. 102(e) as being anticipated by Powers et al. (US Patent 6,513,027) hereinafter Powers.

7. As per independent claims 41, 46, 50, 63-64 and 69-70, Powers teaches as a terminological system automatically generates subcategories from categories of knowledge base. The dimensional category vectors for each term are analyzed to determine if one or more clusters of terminological group exists and if so, then the groups form terms associated with a new subcategory (col. 2, lines 33-34 and 46-51). Powers teaches the claimed, constructing a trainable semantic vector for each sample

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dataset relative to the predetermined categories in a multi-dimensional semantic space (Fig. 1, col. 3, lines 63-67). Powers teaches the claimed, constructing a trainable semantic vector for each category based on the trainable semantic vectors for the sample datasets (Fig. 1, col. 4, lines 12-19). Powers teaches the claimed, receiving a new dataset (Fig. 1, 7, col. 13, line 50). Powers teaches the claimed, constructing a trainable semantic vector for the new dataset (Fig. 1, col. 4, lines 12-19). Powers teaches the claimed, determining a distance between the trainable semantic vector for the new dataset and the trainable semantic vector of each category (Fig. 1, col. 4, lines 4-9). Powers teaches the claimed, classifying the new dataset within the category whose trainable semantic vector has the shortest distance to the trainable semantic vector of the new dataset (Fig. 1, col. 10, lines 14-23).

8. As per dependent claims 42, 47 and 51, Powers teaches the claimed, the datasets correspond to documents (col. 3, lines 36-39).

9. As per dependent claim 44, Powers teaches the claimed, detecting when a prescribed number of new datasets has been classified and updating the trainable semantic vectors for each of the categories (Fig. 1, col. 10, lines 28-48).

10. As per dependent claim 45, Powers teaches the claimed, the step of updating comprises the step of re-constructing trainable semantic vectors for each category based on the trainable semantic vectors for the sample datasets and the trainable

semantic vectors for the new datasets added to each category (Fig. 1, col. 4, lines 12-19).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 43, 48 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Powers et al. (US Patent 6,513,027) hereinafter Powers, and in view of Johnson et al. (US Patent 6,418,434) hereinafter Johnson.

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13. As per dependent claims 43, 48 and 52, Powers does not explicitly teach datasets as email messages. However, teaches the claimed, the datasets correspond to email messages and the categories correspond to frequently asked questions with substantially static responses (Fig. 1, col. 1, lines 39-42 and col. 5, lines 43-46). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have been combined the teachings of the cited references because Johnson's teachings would have allowed Powers' method to provide a two stage messaging system would be cost efficient, easy to maintain, and provide a high speed and accurate response system (col. 3, lines 14-16).

Allowable Subject Matter

14. Claims 72-78 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

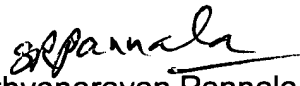
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Roneş can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sathyanarayan Pannala
Primary Examiner

srp
December 7, 2006